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IN THE SPECIFICATION

Page 1, lines 17-24 have been amended as follows:

Taiwan Patent Application No. 79107562, entitled "METHOD FOR PRODUCING POLYURETHANE ~~SYNTHESTIC~~ SYNTHETIC LEATHER USING LIGHT WEIGHT POLYPROPYLENE NONWOVEN FABRIC AS A SUBSTRATE," discloses a method for producing leather substrates from polypropylene fiber ranging from 1 to 10 denier per filament. Although the leather thus obtained is lighter than conventional leather, it is not easy to produce artificial leather having genuine-like touch and fluff-like properties because the fiber used in the method is not sufficiently thin enough.

Page 2, lines 7-11 have been amended as follows:

Therefore, for the time being, there is a need for **[[a]]** **an** ultrafine fiber having low density and high flexural modulus to be made into a substrate as material for producing an artificial leather or fabric having, in addition to genuine leather-like feel, considerably reduced weight when compared to conventional artificial leather.

Page 2, line 15 through page 3, line 19 have been amended as follows:

Accordingly, it is an ~~object~~ **objective** of this invention to provide a method for producing **an ultrafine fiber for making** a light weight ultrafine fiber fabric ~~by using sea and island ultrafine fiber~~.

It is ~~an object~~ **another objective** of this invention to provide a method for producing **[[a]]** **an** ultrafine fiber fabric **substrate for making an artificial leather** having genuine-like touch **or for making** a light weight fabric ~~by using the light weight ultrafine fiber fabric~~.

In order to accomplish the above and other ~~objects~~ **objectives**, an olefin polymer having a density less than 1.0 g/cm^3 and a flexural modulus more than 9000kg/cm^2 is used in the subject invention as an island polymer. A polymer having a different dissolving and removing property from that of the island polymer is used in the subject invention as a sea polymer. The density **[[sets]]** **set** forth in the text of the subject invention refers to polymer density obtained by ASTM-D792 at 25℃. The flexural modulus **[[sets]]** **set** forth in the text of the subject invention refers to polymer flexural modulus obtained by ASTM-D790 at 23℃.

A method for producing ~~sea and island~~ **sea-and-island** ultrafine fiber in accordance with the subject invention mainly comprises spinning the island polymer and sea polymer to obtain a fiber. The spinning procedure in accordance with the subject invention comprises mixed

spinning the island polymer and sea polymer in a weight ratio ranging from about 5:95 to 70:30 into the fiber or conjugate spinning the island polymer and sea polymer in a weight ratio ranging from about 5:95 to 95:5 into the fiber. The fiber thus obtained preferably has fineness ranging from about 1 to about 15 denier per filament and the number of the islands in the fiber preferably ranges from about 6 to about 5000. Suitable island polymer for the subject invention includes polypropylene, polyethylene, ethylene-propylene copolymer, and polyolefin elastomer polymer.

The polypropylene **[[sets]]** **set** forth in the text of the subject invention refers to polypropylene homopolymer, polypropylene random copolymer, or polypropylene block copolymer.

The polyethylene **[[sets]]** **set** forth in the text of the subject invention refers to low-density polyethylene, medium-density polyethylene, high-density polyethylene or linear low-density polyethylene polymer.

Page 4, line 1 through page 5, line 5 have been amended as follows:

The method for producing an ultrafine fiber fabric in accordance of the subject invention mainly comprises producing a nonwoven fabric or fabric substrate from the above-mentioned ~~sea and island~~ **sea-and-island** ultrafine fiber and dissolving and removing the sea polymer of the substrate so as to obtain an ultrafine fiber substrate. The island polymer obtained from the selected polyolefin polymer has low density and high flexural modulus properties. With the same weight per area, the substrate of the subject invention is thicker than that of conventional substrates made of nylon or polyester fiber as an island polymer. Due to high flexural modulus property of the island polymer obtained from the selected polyolefin polymer, the thickness reducing ratio of the substrate obtained from dissolving and removing the sea polymer in accordance with the subject invention is less than that of the conventional substrates. Hence, the weight of the nonwoven fabric or fabric substrate in accordance with the subject invention can be considerably reduced. The desired thickness of the final products can still be obtained after dissolving and removing the sea polymer.

In case of using the above-mentioned substrate of the subject invention to produce an artificial leather, during the step of producing a substrate, a nonwoven substrate is obtained from the above-mentioned ~~sea and island~~ **sea-and-island** ultrafine fiber. The nonwoven substrate is immersed into a polymer (for example a solvent-soluble polyurethane resin or a water-soluble polyurethane resin). The sea polymer in the nonwoven substrate is removed and then a semi-

finished artificial leather is obtained. The semi-finished artificial leather is dried and surface polished to obtain an artificial leather having genuine leather-like touch and light weight ultrafine fiber. It should be noted that when the sea polymer is the water-soluble polymer mentioned previously, the sea polymer of the substrate could be dissolved and removed simultaneously in a step of a water-washing step contained in the step of immersing nonwoven substrate (for example immersing the substrate into a solvent-soluble polyurethane resin). In addition, the light weight ultrafine fiber fabric can be produced from obtaining common fabric, for example, weaving or knitting, from the sea and island ultrafine fiber and then dissolving **and** removing the sea polymer from the fabric.

Page 5, lines 7-15 have been amended as follows:

The subject invention provides a method for producing ~~sea and island~~ **sea-and-island** ultrafine fiber, characterized by selecting a polyolefin polymer having a density less than $1.0g/cm^3$ and flexural modulus more than $9000gk/cm^2$ as an island polymer and selecting a sea polymer having a different dissolving and removing property from that of the island polymer. The subject invention also provides a method for producing an ultrafine fiber substrate using the fiber obtained from the above-mentioned method and dissolving and removing the sea polymer of the substrate. The detailed descriptions with respect to the method for producing an ultrafine fiber are as follows:

Page 6, lines 6-20 have been amended as follows:

Then, the island polymer and sea polymer are spun into yarns by a mixed spinning method or a conjugate spinning method. The so-called mixed spinning method pertains to mixing the sea polymer and island polymer, melting the polymers in the same extruder, and extruding the polymers through a spinneret to produce yarns. The so-called conjugate spinning method pertains to mixing and melting the sea polymer and island polymer in different extruders and combining the two polymers at a spinneret [[as]] **into** yarns. In case of producing fiber by the mixed spinning method in accordance with the subject invention, the mixing weight ratio of the island polymer and sea polymer ranges from about 5:95 to 70:30. In case of producing fiber by the conjugate method in accordance with the subject invention, the mixing weight ratio of the island polymer and sea polymer ranges from about 5:95 to about 95:5. The number of the island present in the fiber obtained by the mixed spinning method ranges from about 100 to about 5000

while the number of the islands present in the fiber obtained by the conjugate method ranges from about 6 to 1000.

Page 6, line 23 through Page 7, line 12 have been amended as follows:

A nonwoven or woven substrate is produced from the ultrafine fiber produced in the previously mentioned method. In case of obtaining a nonwoven from the above-mentioned fiber, undrawned yarns (UDY) of about 3 to 30 denier per filament are obtained from the above two spinning methods and are stretched, crimped and lubricated with oils to produce staple fiber having a fineness about 1 to about 15 denier per filament. Then, the staple ~~filaments~~ **fibers** are opened, carded, crosslapped, and punched by needle (or water-jet) to produce a nonwoven substrate. In case of obtaining a woven fabric from the above-mentioned fiber, undrawn yarns (UDY) are produced from the above two spinning methods and are drawn~~, textured-yarned~~ **and texture-yarned** to produce filaments. Then, the filaments are weaved **[[intro]]** **into** a woven substrate.

[[A]] **An** ultrafine fiber substrate can be obtained by removing the sea polymer in the substrate from the above methods. The island polymer is removed and only sea polymer remains. Hence, the fineness of the fiber in the substrate ranges from about 0.001 to about 0.5 denier per filament. The substrate relates to **[[a]]** **an** ultrafine fiber substrate.

Page 8, lines 19-26 have been amended as follows

Polypropylene ester pellets having a MI of 35g/10min (FORMOSA TAFFETA CO., LTD) and thermoplastic polyvinyl alcohol ester pellets (U.S. AIR PRODUCT AND CHEMICAL CO) having a MI of 15g/10min **[[are]]** **were** mixed in 50:50 weight ratio**[[,]]** **and then** fed to ~~extruders~~ **an extruder** (temperature in sections 1 to 5 in the extruder are set at 170°C, 200°C, 220°C, 220°C, and 220°C) for mixing and melting**[[,]]**. **The polymer thus obtained was** extruded under a spinneret at spinning temperature 220°C, **[[an]]** **at a** single hole output **speed** of 0.5g/min, and **at** a rolling speed 300m/min to produce undrawn yarns having 15 denier per filament and about 1000 islands.

Page 9, lines 5-13 have been amended as follows:

The fiberfill thus obtained **[[is]]** **was** subjected to the steps of opening, carding, crosslapping, needle-punch to produce a nonwoven substrate having 300g/m^2. The nonwoven substrate **[[is]]** **was** immersed in a polyurethane resin, and then solidified, washed in water, dried to produce an ultrafine semi-finished artificial leather having polypropylene fiber. During water

washing step, water [[is]] **was** maintained at 90°C to remove polyvinyl alcohol simultaneously. Then, an ultrafine fiber having a fineness of 0.002 denier [[is]] **was** obtained. After being surface polished and lamination treatment, an ultrafine light weight artificial leather having a thickness of 1.2 mm [[is]] **was** obtained.

Page 9, lines 15-22 have been amended as follows:

Polypropylene ester pellets having a MI of 5g/10min (FORMOSA TAFFETA CO., LTD) and polyethylene terephthalate containing a sulfonic sodium salt having a IV of 0.68 (Far Eastern Textile Ltd.) [[are]] **were** fed into extruders for melting, respectively, and their weight ratio is adjusted in 70:30 by a gear pump. The polymer thus obtained [[is]] **was** extruded under a conjugate sea type spinneret at spinning temperature 290°C, [[an]] **at a** single hole output **speed** of 1.0g/min, and **at** a rolling speed 1000m/min to produce undrawn yarns having 9 denier per filament and about 37 islands.

Page 10, lines 1-9 have been amended as follows:

The fiberfill thus obtained [[is]] **was** subjected to the steps of opening, carding, cross lapping, needle-punch to produce a nonwoven substrate having 250g/m^2. The nonwoven substrate [[is]] **was** immersed in a polyamino resin, and then solidified, washed in water, dried, and removing polyethylene terephthalate containing a sulfonic sodium salt with sodium hydroxide about 30 min at 75°C to produce a ultrafine semi-finished artificial leather having polypropylene fiber. Then, [[a]] **an** ultrafine fiber having a ~~finess~~ **fineness** of 0.07 denier [[is]] **was** obtained. After being surface polished and lamination treatment, a ultrafine light weight artificial leather having a thickness of 1.0mm [[is]] **was** obtained.

Page 10, lines 11-13 have been amended as follows:

Polypropylene and nylon 6 [[are]] **were** used as island polymers to produce artificial leather according to the method substantially the same as that of Example 1. The comparison is shown in Table 1.